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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,748	07/31/2001	Robert E. Gillis	016494-001100US	5719

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TOWNSEND AND TOWNSEND AND CREW, LLP  
TWO EMBARCADERO CENTER  
EIGHTH FLOOR  
SAN FRANCISCO, CA 94111-3834

EXAMINER

YIP, WINNIE S

ART UNIT	PAPER NUMBER
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3637

DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/919,748

Applicant(s)

GILLIS, ROBERT E.

Examiner

Winnie Yip

Art Unit

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Part II DETAILED ACTION***

This office action is in response to applicant's amendment filed on July 23, 2000.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

1. Claims 5-7, 12-14, and 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claims 5-7 and 12-14, the recited limitation feature "a tension harness" is confusing whether this "tension hardness" of claims 5-7 and 12-14 is a different tension harness than of one in claim 1. If so, applicant needs to differentiate them such as by "first tension harness" and "second tension hardness". If they are the same, they must be defined with proper antecedent basis or same terminology.

In regard to claims 16-17, the recited limitation features "at least one tension harness" (claim 16) and "each tension harness" (claim 17) do not appear to consist with the limitation of the body of the claim because there is only "a tension harness" being previously defined in claim 1.

***Claim Rejections - 35 USC § 103***

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warner et al. (US Patent No. 4,106,520) in view of Cannon et al. (US Patent NO. 4,677,999).

Warner et al. show and disclose a frame for a shelter structure, comprising a plurality of flexible poles (10) each having two terminal ends, the poles being assumed a substantially actuate shape under tension with the two terminal ends (11) being terminated into a common plane such as to the ground to define a dome-shaded interior volume, the poles (10) being intersected to form a plurality of crossings (13) and a plurality of four-sided openings adjacent each other, each of the four-sided opening having vertices formed by crossings of poles and sides formed by sections of poles, and a flexible membrane being supported by the poles at a plurality of points. Warner et al. do not define the shelter structure having at least one of the tension harness extending across the opening and connecting the non-adjacent pair of diagonal vertices of the opening as claimed. Cannon et al. teaches a shelter structure having a plurality of poles being connected together to define a plurality of crossings (T1, T2) and a plurality of four-sided openings adjacent each other, a plurality of tension harnesses (10) extending across the opening and connecting each non-adjacent pair of diagonal vertices (i.e., P9, P11) for providing stronger support to a flexible membrane (13) supported thereon, and at least one tension harness (7) having a free end fastened to a common plane such as ground. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shelter structure of Warner et al. having suitable tension harnesses extending across the openings of the poles and directly connecting the non-adjacent diagonal vertices of the openings as taught by Cannon et al. for providing the shelter frame with a strongly support to the flexible membrane at the locations of openings.

In regard to claims 5-7 and 12-15, it is common engineering practice to provide suitable numbers of tensions harnesses extending across and connecting suitable non-adjacent pairs of

vertices of openings in various arrangement as claimed as an obvious matter of design choice for providing a frame with suitable tensioning support for various applications.

***Response to Amendment***

3. Applicant's arguments filed October 28, 2002 with respect to claims 1-20 under U.S.C. 102/103, and specifically to the feature for "directly connecting a non-adjacent pair of vertices of opening" has been considered. This feature was not specifically and previously claimed in claims. Therefore, this argument is deemed to be moot in view of the new grounds of rejection.

***ACTION IS FINAL***

4. Applicant's amendment necessitated the new grounds of rejection. Accordingly, THIS ACTION IS MADE FINAL. See M.P.E.P. ' 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. ' 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. ' 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

***Inquiry Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 703-308-2491. The examiner can normally be reached on M-F (9:30-6:30), Second Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

LANNA MAI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600



wsy  
January 22, 2003